

CLAIMS

1. A mobile station apparatus comprising:

a first receiver that performs first receive processing including demodulation, decoding, and error
5 detection of a downlink data channel;

a second receiver that performs second receive processing, including demodulation and decoding of a downlink control channel that carries control information required in the first receive processing;

10 a transmitter that transmits a response signal in response to the error detection in the first receiver via an uplink control channel to a base station apparatus; and

a controller that stops at least one of the first
15 receive processing, the second receive processing, and transmission processing of the response signal in the transmitter, depending on a transmission timing of the response signal.

2. The mobile station apparatus of claim 1, further
20 comprising a detector that detects a period in which no uplink signal is transmitted to the base station apparatus,

wherein, when the period includes the transmission timing of the response signal, the controller stops one
25 or both of the first receive processing with respect to a sub-frame of the downlink data channel corresponding to the response signal and the second receive processing

with respect to a sub-frame of the downlink control channel carrying control information that is necessary to receive said sub-frame of the downlink data channel.

3. The mobile station apparatus of claim 1, wherein,
5 when the transmitter repeats transmitting the response signal in response to a same sub-frame of the downlink data channel, the controller stops one or both of the first receive processing with respect to sub-frames of the downlink data channel corresponding to second and
10 later retransmissions and the second receive processing with respect to sub-frames of the downlink control channel carrying control information that is necessary to receive said sub-frames of the downlink data channel.

4. The mobile station apparatus of claim 1, further
15 comprising a detector that detects a timing a destination of the response signal changes from one base station apparatus to another base station apparatus,

wherein, when the timing is detected between a reception start timing of a sub-frame of the downlink
20 data channel and a transmission end timing of a response signal corresponding to said sub-frame of the downlink data channel, the controller stops one or both of the first receive processing with respect to said sub-frame of the downlink data channel and the second receive
25 processing with respect to a sub-frame of the downlink control channel carrying control information that is necessary to receive said sub-frame of the downlink data

channel.

5. The mobile station apparatus of claim 1, further comprising a detector that detects a timing a destination of the response signal changes from one base station apparatus to another base station apparatus,

wherein, when the timing is detected between a reception start timing of a sub-frame of the downlink data channel and a transmission end timing of a response signal corresponding to said sub-frame of the downlink data channel, the controller stops the transmission processing of the response signal.

6. A receiving method comprising:

performing first receive processing including demodulation, decoding, and error detection of a downlink data channel;

performing second receive processing, including demodulation and decoding of a downlink control channel that carries control information necessary to receive the downlink data channel;

transmitting to a base station apparatus a response signal in response to the error detection in the first receive processing via an uplink control channel; and

stopping at least one of the first receive processing, the second receive processing, and transmission processing of the response signal, depending on a transmission timing of the response signal.